



## spike

*Elliptio dilatata*

Kingdom: Animalia  
Division/Phylum: Mollusca  
Class: Bivalvia

## Features

The shell of a spike mussel is elongate and somewhat oval. It is compressed to moderately "inflated." The anterior end is rounded and the posterior is rounded to slightly pointed. The dorsal (hinge) side is straight or slightly curved and the ventral side is straight or slightly curved in younger individuals, curving toward the hinge side in older shells. The outside of the shell is smooth. Smaller shells are greenish brown with faint green rays. Adults are dark brown to black. The inside of the shell usually is purple, but may be pink or white. Spikes may grow to five inches long.

## Natural History

Spikes are found in small to large streams and occasionally in lakes in sand or gravel. Freshwater mussel distribution in Iowa is not well documented. They have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female

generally expels them into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Hosts for this mussel include several species, most widespread and common. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

## Habitats

interior rivers and streams; constructed lakes, ponds, and reservoirs

## Iowa Status

uncommon; native

## Iowa Range

northeastern three-fourths of Iowa

## Bibliography

Iowa Department of Natural Resources. 2001.  
*Biodiversity of Iowa: Aquatic Habitats* CD-ROM.